

Connecticut River Aquatic Habitat Connectivity

Fish Passage in the Nulhegan River Watershed

Upper East Branch on Sable Mountain Rd, Averill, Vermont



Before



After

Left: A view of the Upper East Branch culvert outlet on Sable Mt. Rd showing an old tank culvert with zero fish or aquatic organism passage.
Right: Upper East Branch bridge at Sable Mt. Rd crossing designed for fish and aquatic organism passage as well as flood resiliency.

Site description: The Upper East Branch in Averill Vermont is a headwater tributary to the Nulhegan River and supports a thriving fishery including Atlantic salmon and a wild brook trout population. This new bridge will allow native brook trout to access 8.3 miles of critical thermal refugia and spawning habitat.

Problems / history: Endemic to the Upper Connecticut watershed and its major tributaries, the East Branch suffers from nearly 150 years of poor logging practices, largely from the intensive logging, dams, and drives of the late 1800's to more recent road building activity. As a result it runs wide, shallow, scours habitually, lacks stream complexity and connectivity. An old tank culvert on Sable Mountain Rd has severe damage due to age and has become a barrier to all fish and other aquatic passage.

Objective and Method: The partnership's objective is four-fold, reconnect the mainstem to its tributaries; restore the watersheds instream habitat, largely with wood additions; interrupt the habitual scouring cycle that plagues and delays the stream's natural recovery; increase headwater pools and depth to decrease overall water temperature spikes. A licensed consultant designed and engineered the crossings for replacement. Fish, water temperature, water chemistry, and habitat data collected from 2009 to 2011 will be used to prioritize reaches for "chop & drop" instream restorations.

Partners and Funding: Funding and support for this project came from the Trout Unlimited, Plum Creek Timber Company, Upper CT River Mitigation and Enhancement Fund (MEF), VT Watershed Grant, State Wildlife Grant, Nulhegan Basin Program, Orvis, Eastern Brook Trout Joint Venture Grant and the US Fish and Wildlife Service.

Cost:

Trout Unlimited	MEF	Nulhegan Wildlife Refuge	EBTJV	VT Fish and Wildlife	TOTAL
\$8,569	\$6,000	\$600	\$8,000	\$1,250	\$24,419